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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/634,498

08/05/2003

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27593CIP

7062

33357 7590 04/20/2011
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EXAMINER

MATTHEWS, WILLIAM H

ART UNIT

PAPER NUMBER

3774

MAIL DATE

DELIVERY MODE

04/20/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 2/10/11 have been considered but are moot in view of the new grounds of rejection set forth below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 32-33,35-36,38-54,56-81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horn et al. USPN 4888012 ("Horn") in view of Hanna USPN 6749634, Zadno-Azizi USPN 20030074060 ("Zadno-Azizi"), Portney USPN 7097660, and Weinschenk, III et al USPN 6599317 ("Weinschenk").

Horn disclose in figures 4-6 an intraocular lens comprising arms 84 and legs 44, collectively forming the outer body of a positioning member surrounding optic lens 12. Accommodation is achieved via external forces causing a shape and curvature of the optic to change. The optic may be formed of gel or liquid material.

Regarding claims 32,48,53, and 72-77, with respect to limitations regarding biased to the unaccommodated state in the absence of any forces, stiffer haptics, and/or a pushing/compressive force to cause accommodation via shape change of the optic, the lens of Horn is designed to be stretched to an unaccommodated state and

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then compressive forces from the ciliary body relax the tension within haptics to allow accommodation. Since the lens haptics are tensioned in the unaccommodated state, it arguably does not provide a pushing or compressive force on the lens during accommodation (compression force from the ciliary muscles). Each of Portney and Zadno-Azizi and Weinshenk teach accommodating IOLs wherein the at-rest state of the lens is unaccommodated and the haptics directly translate a compressive force to cause accommodation. Zadno-Azizi teach haptic biasers 1000 (paragraph 0209 and figures 38C-D) which can provide a haptic with material characteristics to bias a lens in either of the accommodated or unaccommodated state as needed for a particular patient.

Portney teach in Figure 18 an accommodating IOL whereby the IOL is biased to an unaccommodated state and haptics are designed to be stiffer such that they translate the compressive force from the ciliary body to an optical lens to deform it. See column 2 lines 60-66, column 11, and figure 18. Weinschenk teach an IOL biased to the unaccommodated state (Figure 2) whereupon compressive force from ciliary muscles the IOL assumes an accommodated shape (Figure 3). Figures 4-6 are similar but utilize a force transfer assembly to translate the radially compressive force to optic. Thus the prior art show it is well known in the art to design accommodating IOLs wherein the IOL system is biased to the unaccommodated state and utilizes relatively stiff haptics to translate radially compressive forces to an optic causing a shape change in the optic. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the IOL of Horn in view of Hanna such that the optic and haptics are comprised of materials and dimensions such that the IOL is biased to an unaccommodated state

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and utilizes relatively rigid haptic members to translate radial compressive forces of the ciliary muscle to achieve accommodation via a shape change as is well known in the art. It is further noted that applicant's specification does not suggest a particular benefit of biasing a IOL system to the accommodated or unaccommodated state (see current specification at page 20 lines 22-26 whereby Applicant acknowledges the equivalence between construction of unaccommodated and accommodated IOLs are admitted.)

With respect to claims 32, 44, 47, 48, 51, 52, 56, and 57, Horn is silent as to providing the optic between the planes, an opening anterior to the optic, an opening behind the optic, an annular portion anterior of the optic, and anterior/posterior segments located anteriorly/posteriorly of the optic. Hanna discloses an accommodating lens system for placement in the capsular bag wherein the outer body of the positioning member comprises anterior and posterior segments located anterior and posterior of the optic and comprises openings anterior and posterior of the optic such that the optic is between planes as claimed. The positioning member is shaped to conform to a capsular bag.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the positioning member of Horn to include anterior and posterior segments located anteriorly and posteriorly of the optic as taught in Hanna in order to provide the lens system with a configuration for placement in the capsular bag. Both devices are disclosed to accommodate in response to the natural eye muscle function and are considered analogous art.

Regarding claims 42,43 and 49, Hanna and Horn are silent as to the dimension along the optical axis and the diopter power of the lens. However, Hanna and Horn are directed to accommodating implants which are adapted to treat a wide range of patients. Therefore it would have been obvious to one of ordinary skill in the art to select the particular sizes and optical powers in order to fit a particular patients needs. Furthermore, the claimed ranges are well within ranges known in the art and would thus be a matter of obvious design choice.

Regarding claims 78-81, the optic of Horn is disclosed to include a single liquid or gel material enveloped by a single material such that the refractive index is uniform.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Matthews (Howie) whose telephone number is 571-272-4753. The examiner can normally be reached on Monday-Friday 10-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Isabella can be reached on 571-272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William H. Matthews/
Primary Examiner
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